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Medical students' knowledge of child abuse and neglect in Saudi Arabia: A cross-sectional study

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ABSTRACT

Background: Child abuse and neglect are considered one of the problems that affect the child and lead to various psychological problems. **Methodology:** This was a cross-sectional questionnaire that included all medical students in Saudi Arabia. **Results:** Total of 403 of medical students participated in our study. About 54.8 % and 54.3 % of them were male and aged between 22-24 years old, respectively. About 55.8 % of participants indicated having an educational training about child abuse and neglect during their study. Our participants believed that the main risk factors for child abuse were alcoholic parents (82.9 %), parents with mental conditions (74.4 %), marital and family problems (72.2 %), low socioeconomic status (70.2 %), and low level of education of parents (67 %). **Conclusion:** Good knowledge was observed among medical students regarding risk factors and symptoms of child abuse and neglect but with lack of confidence. The medical students believed that developing a curriculum for under-graduate students and further specialized training is required to gain more experience with diagnosing and referring children who have been abused or neglected.

Keywords: Child abuse, child neglect, medical student, knowledge, Saudi Arabia

1. INTRODUCTION

Child abuse is very serious issue to many countries among the world and associated with high risk to many of psychological diseases (Zeanah and Humphreys et al., 2018). Based on World Health Organization (WHO), the abuse could be emotionally, physically, sexually and neglect (Al Khatib, 2020). Recognizing abused child it's not simple at it sounds every physician must know the features of abused child and at least few features should be known for every member of society to report and to be aware how serious this issue is (Finkelhor and Korbin et al., 1988).



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A research was done by Mogaddam et al., (2016) in Jeddah among the dentists about the response to child abuse cases, the study showed that 11% of the participants had suspicion of child abuse case and only 3% of cases were reported. Another study done in Saudi Arabia among dentists, showed that over the five years 59% of the participants had child abuse case and only 10% were reported (Al-Dabaan et al., 2014). Other one was done in primary health care physician in Abha, showed good awareness in identify the child abuse cases, but 64% of the physicians didn't respond to the case due to (unclear reporting procedures and traditions) (Alsaleem et al., 2019). There was a research done among Saudi pediatricians, pediatric residency trainees and medical students and it showed high knowledge about identifying child abuse and how they act on it, also showed major defect about reporting child abuse cases and its process (Alnasser et al., 2017). Other paper in Saudi Arabia about Pediatrician knowledge in child abuse cases and reporting procedure and it showed good knowledge in detect the case and lake of knowledge regarding reporting procedure (Habib,2012).

There was research in Kuwait about Pediatricians' knowledge regarding child maltreatment, showed sufficient knowledge about child maltreatment, and 41% of them were received some information on diagnosing and reporting child maltreatment (Al-Moosa et al., 2003). In this study, we aim to assess the awareness of medical students in Saudi Arabia about child abuse and neglect.

2. MATERIALS AND METHODS

This was a cross-sectional questionnaire-based study conducted in Kingdom of Saudi Arabia. The study was targeted all medical students from different universities in Saudi Arabia and excluded any non-medical students. An electronic form questionnaire was used in this study. The informed consent was displayed in the first page of the questionnaire. The first four questions were about demographic data like age, gender, name of the university, the academic year level, and educational training about child abuse and neglect (Yes/No question). The rest of the questionnaire assessed different aspects of child abuse and neglect like risk factors, clinical presentations, reasons of late diagnosis, and referral procedures. The duration of study started from February 2021 to May 2021. The research was approved from Institutional Review Board (IRB) of Al-Imam Mohammad Ibn Saud Islamic University with number 25-2021 (registration HAPO-01-R-0011)

Data Management and Analysis Plan

A convenient sampling technique was used in this study. The data of study was analyzed through using the Statistical Package for the Social Sciences (SPSS version 24), and the result was presented as percentage and number.

3. RESULTS

In this study, we can able to collect 403 responses to our questionnaire. Among them, 54.3 % were aged between 22-24 years old while 54.8 % of them were males. Considering university of students, we found that 34 % of them indicated that they educated in Imam Muhammad Ibn Saud Islamic University followed by Taibah University (19.1 %) and Alrayan medical colleges (6.5 %). Moreover, 29 % of participants were in the fifth year while 25.3 % in third year and 23.3 % in fourth year. Furthermore, the participants who took educational training about child abuse and neglect while they were in college were account for 55.8% as seen in Table 1.

Table 1 Demographic factors of participants			
		Count	Column N %
Age	18-21	148	36.7%
	22-24	219	54.3%
	25 and above	36	8.9%
Gender	Male	221	54.8%
	Female	182	45.2%
Name of the University	Imam Muhammad Ibn Saud Islamic University	137	34%
	King Saud bin Abdulaziz University for Health Sciences	18	4.5%
	Al Maarefa University	12	3%
	Qassim University	13	3.2%
	Alrayan medical colleges	26	6.5%

	Taibah University	77	19.1%
	Shaqra University	2	0.5%
	Majmaah University	10	2.5%
	Other	108	26.8%
Level	First	46	11.4%
	Second	28	6.9%
	Third	102	25.3%
	Fourth	94	23.3%
	Fifth	117	29%
	Intern	16	4%
Have you had any educational training about child abuse and neglect during your undergraduate study?	Yes	225	55.8%
	No	178	44.2%

Considering students' perception about social indicators and risk factors for child abuse and neglect, we found that the main risk factors for child abuse according to our participants were having alcoholic parents (82.9 %), parents with mental conditions (74.4 %), marital and family problems (72.2 %), low socioeconomic status (70.2 %) and low level of parents' education (67 %) as shown in figure 1.

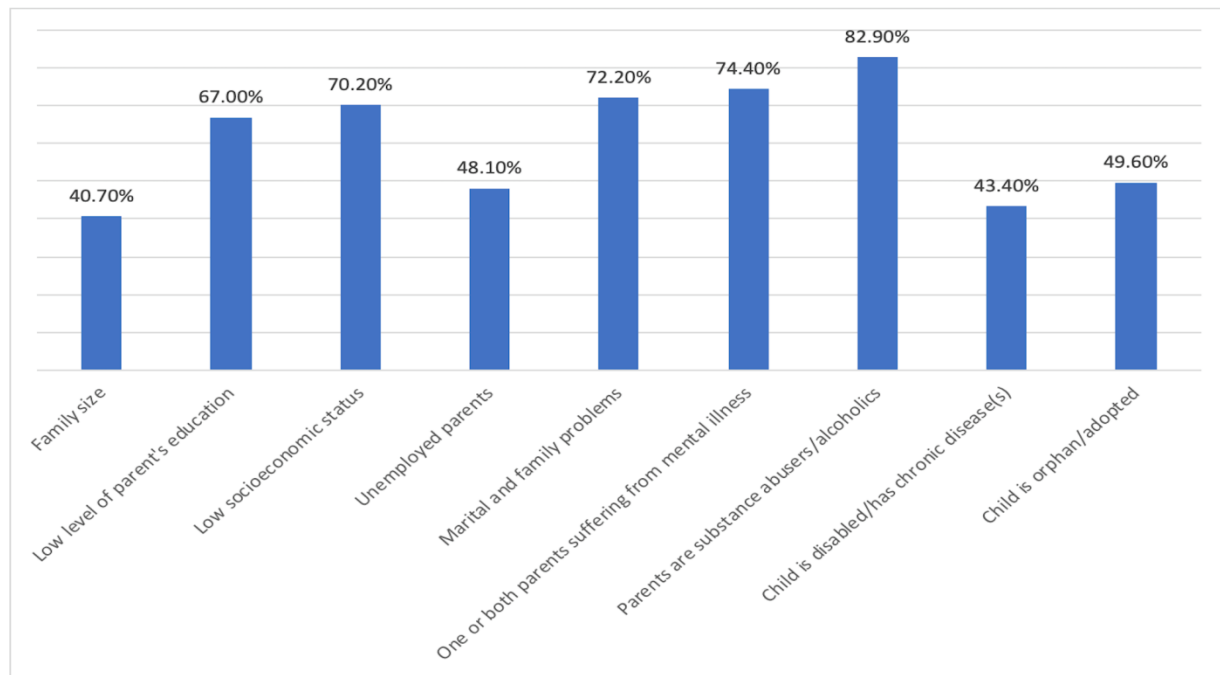


Figure 1 Students' perception about social indicators and risk factors for child abuse and neglect

Moreover, we found that the main clinical presentations of child abuse known to medical students were presentation of child with signs of unaccountable fear of a particular place or person (76.4 %), multiple bruises in different healing stages (75.7 %), children's poor general hygiene (63.8 %) and when parent keeps changing of the child's history of illness (63.3 %). This is better shown in figure 2.

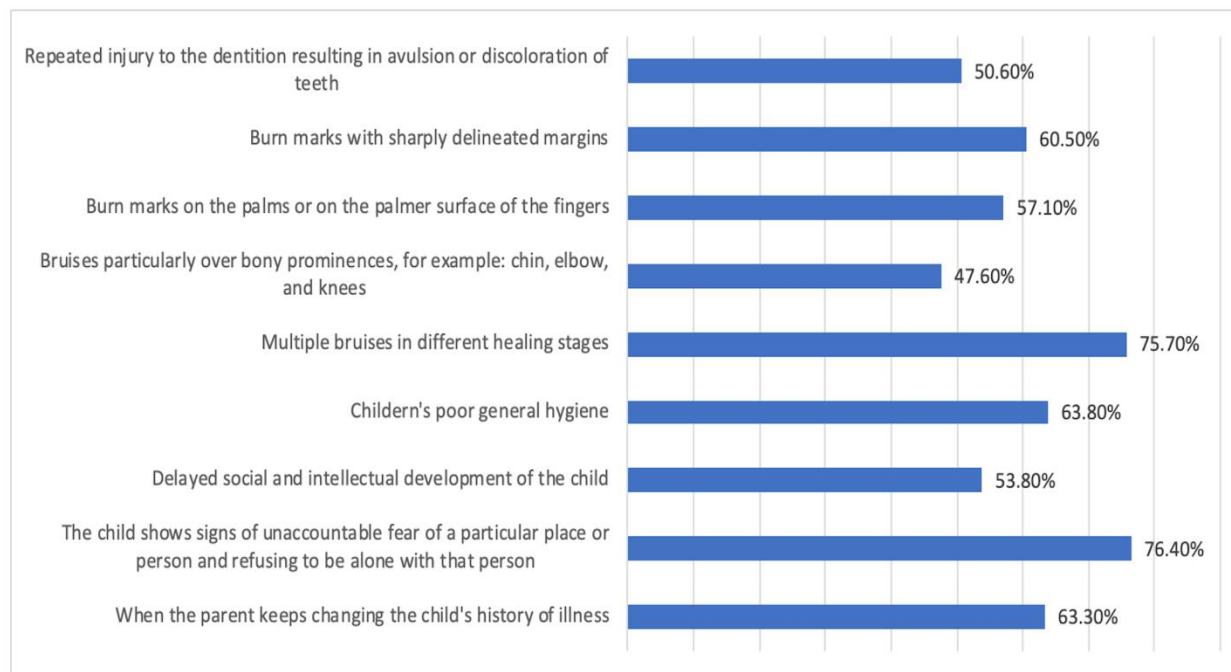


Figure 2 Knowledge of students about clinical presentations are indicative of child abuse and neglect

In addition, we found that most of students did not think that children who have been physically abuses will usually tell someone about the abuse where only 10.5 % of them thought that this could happened while 58.6 % of students were either agree or strongly agree that in most cases of child abuse and neglect, the perpetrator/s are the parents. Furthermore, 25.1 % of participants strongly did not think that the best way to deal with these cases is to confront the parents directly and accuse them while 65 % of them have the knowledge that there are agencies within the government to protect children from child abuse and neglect. We also found that 54.6 % of participants thought that they could differentiate between child abuse and neglect case and an accidental injury. However, 34 % of them did not thought that current medical and dental schools provide good background about child abuse and neglect, and 74.4 % of them thought that they need further specialized training to deal with child abuse and neglect where 48.2% reported degree of uncertainty about the diagnosis of the case as a child abuse case as seen in table 2.

Table 2 Knowledge among medical students about diagnosis of abuse					
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Children who have been physically abused will usually tell someone soon after the abuse	26.3%	45.4%	17.9%	6.5%	4.0%
In most cases of child abuse and neglect, the perpetrator/s are parents	4.7%	10.4%	26.3%	48.4%	10.2%
The best way to deal with suspected cases of child abuse and neglect is to confront the parents directly and accuse them	25.1%	29.3%	26.6%	15.4%	3.7%
There are agencies within the government to protect children from child abuse and neglect	4.5%	7.7%	22.8%	37.7%	27.3%
I can differentiate between a child abuse and neglect case and an accidental injury	4.5%	13.9%	27.0%	40.7%	13.9%
Current medical or dental schools provide good background about child abuse and neglect	11.9%	22.1%	34.7%	22.6%	8.7%
I need further specialized training to deal with child abuse and neglect	2.7%	6.0%	16.9%	37.7%	36.7%
Uncertainty about the diagnosis of the case as a child abuse case	6.5%	10.9%	34.5%	38.5%	9.7%

Moreover, in our study, the main reasons reported by students that lead to late diagnosis and referral procedures were fear of violence or unknow consequences to children (33 % strongly agree and 37.7 % agree), followed by lack of confidence in child protection services (27.3 % strongly agree and 28.3 % agree) and lack of knowledge about referral procedures (16.6 % strongly agree and 37.5 % agree) as shown in figure 3.

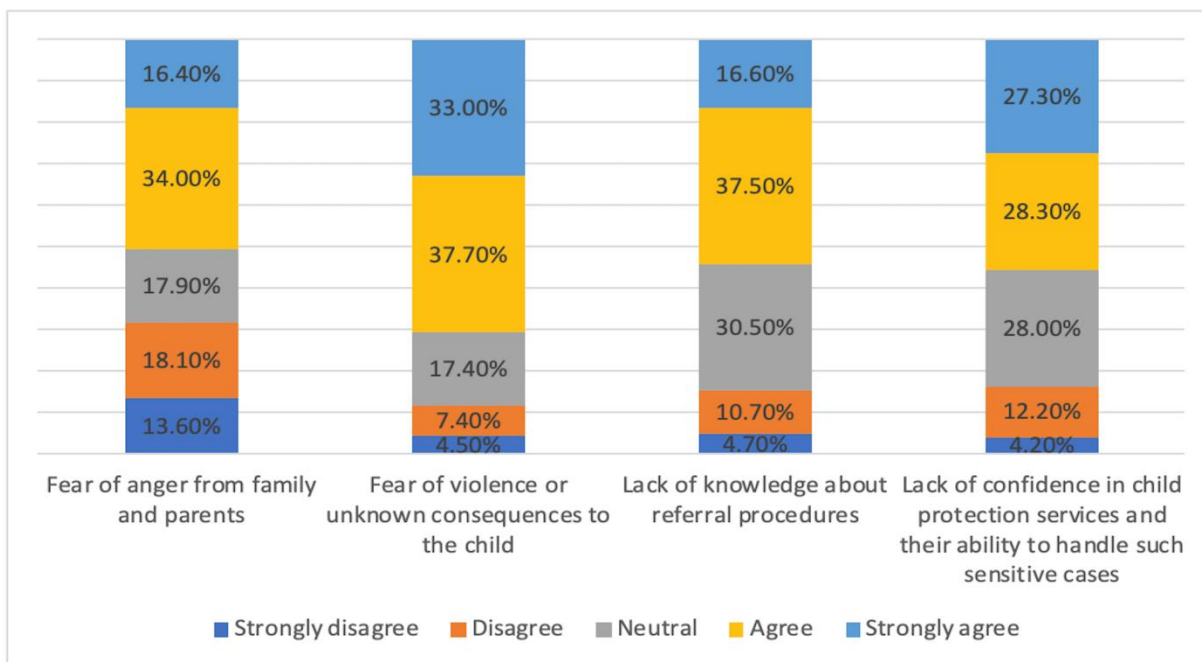


Figure 3 Students' perception about reasons of late diagnosis and referral procedures

4. DISCUSSION

Child abuse in Saudi Arabia was not properly detected and reported until the 1990s according to Al-Mugeiren and Ganelin et al., (1990), and a series of cases were later identified that led to the establishment of a national team to diagnose and evaluate suspected cases in Child Abuse and Neglect (CAN) (Al-Eissa, 1998). All health care providers are required to report cases of child abuse. However, reporting child abuse and neglect has always been a dilemma as stated by Al Eissa and Almuneef et al., (2010). The Kingdom of Saudi Arabia enacted a law in August 2013 and November 2014 to prevent child abuse and neglect and protect their rights, which is expected to lead to improved healthcare in this regard (Almuneef et al., 2016). In our study, we aimed to assess medical students' knowledge about child abuse and neglect in the Kingdom of Saudi Arabia in several aspects including risk factors, clinical presentations, and reasons of late diagnosis.

Formal child abuse and neglect training during or after the undergraduate study period will increase the ability of health professionals to detect and report suspected cases. In our study, 55.8% of participants indicated that they received education about child abuse and neglect during their college training. This result is almost similar to results from Gopalakrishna et al., (2020) study, which found that 57.5% of participants studied using CAN during undergraduate studies, and a study by Deshpande et al., (2015) which found that 46.1% of medical and 56.1% dental residents received formal education about child abuse. While in a study conducted by Mogaddam et al., (2016) the authors showed that only 14% of dental students had received formal child abuse training.

Regarding the risk factors and social indicators for child abuse and neglect, most of participants in this study knew that parents who are substance abusers or alcoholism is considered the most known risk factor for child abuse followed by parents with mental conditions, marital and family problems, low socioeconomic status and, low level of parents' education which is similar to results of Alnasser et al., (2017) study who reported that parental drug abuse/alcoholism followed by low socio-economical class and child mental retardation were the main risk factors of child abuse known by medical students. However, in another study conducted by Alanazi et al., (2021) the authors found that the main known risk factors of child abuse were parents with psychiatric illness, undereducated parents, parents using illicit drugs or alcohol, and low socio-economic status. On the other hand, about 76.2% participants in Al-Dabaan et al., (2014) study believed that children with disability could be one of the main risk factors of child abuse, while only 43.4% of our participants believed disabled child could be a risk of child abuse.

In our study, unaccountable fear of a particular place or person, multiple bruises in different healing stages, children's poor general hygiene and when parent keeps changing of the child's history of illness were found to be the main symptoms of child abuse known by medical students. In a study conducted by Gopalakrishna et al., (2020) the authors reported that the main symptoms and signs of child abuse and neglect recognized by medical students were multiple bruises in different healing stage, burn marks with sharply delineated margins, signs of unaccountable fear of specific place or person and changing the child's history of illness.

Furthermore, our study reported that most of students believed that children who have been physically abuses usually will not tell someone about the abuse which is similar to other reports including study of Gopalakrishna et al., (2020). On the other hand, another study conducted by Sonbol et al., (2012) in Jordan, it was found that most of the Jordanian dentists incorrectly assumed that abused children would tell somebody immediately after the incidence. Moreover, our study showed that slightly more than half of the sample believed that they had ability to differentiate between child abuse and neglect cases and accidental injury cases. Similarly, Gopalakrishna et al., (2020) study showed that about 50 % of medical students and interns indicated that they could differentiate between child abuse and neglect case and an accidental injury. However, approximately half of medical students in this study stated degree of uncertainty about the diagnosis of the case as a child abuse case, and most of them (about 74.4%) believed that further specialized training is required in order to deal with child abuse and neglect cases. This is similar to results of Gopalakrishna et al., (2020) and study of Alanazi et al., (2021).

Regarding to reasons of late CAN diagnosis and referral procedures, our study showed that the main reasons were fear of violence or unknow consequences to children, followed by lack of confidence in child protection services, and lack of knowledge about referral procedures. In study of Gopalakrishna et al., (2020) the authors found that fear of consequences, uncertainty about the diagnosis, and lack of confidence, were the main barriers for diagnosis of child abuse. In study of Alanazi et al., (2021) avoiding conflict with parents followed with scare of children to report their abuse and inadequate training were the main barriers for not reporting cases of children abuse.

This study had some un-avoidable limitations including depending on self-reported questionnaire which may lead to some personal bias as some participants may randomly answer the questionnaire. Moreover, the study had been distributed using online means which may cause some sampling bias toward those who were able to use internet and online applications.

5. CONCLUSION

In conclusion, in this study, we found good knowledge among medical students about risk factors and symptoms of child abuse and neglect, but lack of confidence was existed among them. According to medical students, there is a need for developing under graduating curriculum and further specialized training in order to increase students' experience of the diagnosis and referral of children with abuse or neglect. Fear of violence or unknown consequences to children, followed by lack of confidence in child protection services, and lack of knowledge about referral procedures are the main barriers against reporting child abuse among our sample.

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Author Contributions

OAA and AMK contributed in the design and idea of the study. MMA and AMK contributed in the data-collection and interpretation of the result. OAA and MNA contributed in drafting of the manuscript. RAA contributed in reviewing and editing the manuscript. All authors approved the final version of the manuscript.

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Conflicts of interest

The authors declare that they have no conflict of interest.

Ethical approval

The study was approved by the Medical Ethics Committee of Al-Imam Mohammad Ibn Saud Islamic University, ethical approval code: 25-2021 (registration HAPO-01-R-0011).

Data and materials availability

All data associated with this study are present in the paper.

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